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United Nations Industrial Development Organization

Distr.  
GENERAL

ID/CONF.1/G.57  
3 July 1967

ENGLISH ONLY

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INTERNATIONAL SYMPOSIUM ON INDUSTRIAL DEVELOPMENT  
Athens, 29 November-20 December 1967  
Provisional agenda, Item 3(b)

FORMULATION AND IMPLEMENTATION OF INDUSTRIAL PROGRAMMES:  
THE GREEK EXPERIENCE

Submitted by the Government of Greece

D01828

67-15872

We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.

1. The analysis of this paper is mainly directed to the problems of formulating a development programme for the industrial sector as a whole. The problem of implementation of an industrial development programme, and that of formulation, evaluation and execution of industrial projects has only occasionally been touched upon, owing to our very limited experience in these fields.
2. Development programming as a government and management technique is a matter of experience rather than science and, as such, allows for very few generalizations. For this reason the present analysis does not purport to derive programming principles of universal applicability, but simply to present some conclusions drawn from our experience in Greece. These conclusions may be of some value for developing countries with an economic, political, and institutional structure similar to Greece.
3. Greek experience is limited to the preparation of two four-year development programmes (1960-64 and 1966-70). Both programmes were largely concerned with the survey of the industrial sector of the economy. The programmes focus on general industrial strategies and policies, and their implications on the economy. Detailed investment programmes have been elaborated only for the public sector, while for the private sector of the economy, which includes practically all manufacturing activity, the allocation of investment by sector and industrial branch was only indicative. No attempt has been made so far to allocate private investment to specific projects. Neither has there been established a mechanism for the implementation and

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follow-up of these programmes. In spite of the above limitations, there is evidence that both programmes have had some favourable effects on the formulation of current economic policies.

4. In formulating a programme for Greek industrial development the following factors should be taken into account: i) the existing economic and social problems, ii) the importance of industry to overall economic development, iii) the available resources and geographical location of the country, iv) the association of the country with the E.E.C., and v) the political and administrative set-up. The implications of these factors on the appropriate form and content of industrial programmes are considered below (paragraphs 5 - 10).
5. Economic and social problems. The recent performance of the Greek economy has been satisfactory. The economic growth rate of the last 6 years was about 7,5 percent per annum, while the living standards, and housing and health conditions improved materially. The results, however, have not been satisfactory from the point of view of creating conditions for further sustained economic and social progress. The structure of output, investment and foreign trade continues to be weak. The dependence of the economy on foreign exchange which is sensitive to monetary and political disturbances continues to be high. Large groups of the population and wide regions of the country have not had their fair share in the growth of prosperity, and emigration has assumed proportions which are economically and socially undesirable. State intervention and restrictions on competition continue to be serious obstacles to industrial development. The country urgently needs radical reform at all levels of general and technical education and training. The existing financial mechanism of the economy leaves much to be desired, while the whole structure of taxation needs radical change in order to be made

more conducive to economic development and improve its equality effects. Owing to the nature of the economic and social problems of the country, the achievement of accelerated and sustained economic development requires that efforts should be concentrated in achieving a more viable and efficient economic and institutional structure.

6. The importance of industry to overall development. Industrial development in Greece is first of all important because of its direct contribution to the solution of economic and social problems, such as raising the average income and productivity levels, creating new employment opportunities, etc. In addition, it is important as a means of overcoming serious constraints to overall economic growth, such as foreign exchange shortages, inadequate domestic savings, and unfavourable structure of demand. However, these factors do not constitute sufficient criteria for establishing priorities in industrial development. If the industrial sector of the economy has significant feed-backs with other sectors of the economy, as is the case with Greek manufacturing,<sup>y</sup> the industrial strategies, priorities and policies can be properly evaluated only in the framework of a general development programme. This implies that the industrial programme should be an integral part of a programme of overall economic development.
7. Resources and geographical location. With the sole exception of tourism, Greece lacks important natural resources which would provide a clear case for international comparative advantage. This means that the development

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<sup>y</sup> The value added component of Greek manufacturing amounts to only 1/3 of its gross output, with the result that its competitive standards may depend more on the productivity levels of the other sectors of the economy, mainly agriculture and some key services, than on its internal efficiency.

of human resources remains the most effective means of increasing productivity and extending the comparative advantage of the economy to new sectors of production. Furthermore, the size of her market is relatively small and its enlargement through international trade is difficult because of her unfavourable location which results in high transportation costs.

8. Association with the EEC. The agreement for gradual economic integration with the E.E.C. renders inapplicable or inefficient customary methods of enlarging the domestic market for industrial products through tariff protection and import restrictions. Industrial export promotion remains the most efficient means of increasing the productivity of domestic factors of production through the exploitation of economies of scale of a large market. The latter requires specialization and concentration of efforts in relatively few sectors, and the manufacturing of products in which Greece has or could develop a comparative advantage. Because of the expected wide changes in technology and relative prices, it has become extremely difficult to define the most profitable branches and industrial projects. This fact has the following implications: i) it makes a strong case in favour of indicative planning (under conditions of great uncertainty, flexibility in the decision making process is indispensable in order to reduce the probability of serious errors), and ii) it suggests that, generally, neutral industrial policies should be preferred to selective ones. More specifically, unless there is a clear case for significant external economies or economies of scale, industrial policies should be neutral with respect to the allocation of resources among the specific branches of industry. Such policies could, of course, be biased in favour of industry as a whole, since industrial development contributes considerably towards the elimination of active constraints to economic growth (foreign exchange shortages, inadequate domestic savings,

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composition of demand, etc.). Furthermore, the need for the country to adapt quickly its economic, social and institutional structure to the new conditions of the association with the E.E.C. sets serious constraints to the choice of priorities (higher priority should be awarded to productivity rather than to employment, etc.) and of the policy means.

9. Political and administrative set-up. A highly centralized mechanism of decision making and direct controls of economic activity is incompatible with free economic institutions such as they prevail in Greece. This means that, for the private sector of the economy, industrial programmes must be necessarily indicative. Also, in countries with political instability, as has been the case in Greece, there is a strong case against obligatory planning, which can be effective only under conditions of continuity in the decision making process. Indicative programming as a decentralized system of decision making and management is not inconsistent with the establishment of public enterprises, provided that they are run on the basis of commercial criteria. Past experience in Greece, however, demonstrates the failure of public enterprise to substitute for private initiative and entrepreneurship, not only in cases where flexibility and quick decision making is a prerequisite to successful management, but also in cases where, according to international experience, they should operate efficiently.
10. In sum, the main points that emerge from the above discussion are: i) The appropriate system of industrial programming should be indicative for the private sector of the economy and obligatory for the public sector. ii) Industrial programming should be an integral part of a general programme of overall economic development. iii) Industrial policies, should be, generally, neutral. iv) Efforts should be concentrated on the development of human resources and achieving a more viable and efficient economic and insti-

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tutional structure.

11. Greek experience shows that indicative planning, in spite of its limitations, can contribute a great deal towards rapid and sustained industrial development through:
  - a. Creating a favourable climate for the application of more rational industrial policies. The educational aspect of planning is extremely important, as a means of creating favourable public opinion for the elimination of some of the existing vested interests and institutional rigidities.
  - b. Providing "free" market research services for the individual enterprises. This is particularly important in countries like Greece, where the industrial structure is dominated by small scale industry which is unable to undertake the financing of the required market research.
  - c. Providing an appropriate framework for identifying and evaluating the likely constraints to economic growth (skilled labour, savings, foreign exchange, etc.), thereby making possible the acceleration of economic development by eliminating or mitigating these constraints through the application of appropriate policies.
  - d. Providing an appropriate framework for evaluating and coordinating industrial policies. Planning may be very important, particularly for countries with a backward civil service. It can help the decision makers take a long-run view of the prospective growth of the economy as well as the broader implications of their decisions.
12. Even in the framework of indicative planning the role of the State should not be underestimated. Firstly, State activities account for a large proportion of the national product (provision of public services, public facilities, public investment, etc.). The productivity of the economic resources

employed by the Greek government is very low compared with the private sectors of the economy and there is wide scope for raising productivity levels through better management. The expansion of basic facilities (transportation, energy, communications, labour training) in accordance with changes in demand, and the provision of such services at the minimum possible cost, could significantly improve the competitiveness of industry and enhance its development prospects. However, the major contribution that the State could make is to promote the establishment of modern institutions (industrial banks, export promotion services, financial intermediaries, etc.) and eliminate existing institutions or practices which impede competition (restrictive practices, licences, etc.) as well as out-of-date bureaucratic practices in the civil service. Above all, the government could promote development through the application of sophisticated and well coordinated industrial policies aimed at providing appropriate incentives to the private sector of the economy. In the context of indicative planning, the role of industrial banks in creating a balanced and diversified industrial structure is of overwhelming importance. Industrial banks can encourage private initiative by providing loans on favourable terms, or by direct participation, and by undertaking risky projects, projects involving heavy capital outlays, or projects which are profitable only in the very long-term. Such projects are necessary for widening the industrial base of the economy, but can hardly be undertaken by private initiative.

13. With respect to the allocation of economic resources among the several branches and regions of the country the following points must be taken into account in the formulation of the programme.
  - a. In an open economy with a prospective gradual integration into a larger economic community, the advantage of international specialization cannot

be neglected. But it is even more important that industrialization should be seen as a dynamic process. According to the existing structure of relative prices and the relative significance of the constraining factors to economic development, it could be argued that the industrial and economic growth of the country is best served by concentrating on industries that are predominantly labour-intensive or good foreign exchange earners. But such a solution could be dangerous to apply freely in a dynamic real world, since economic development amounts exactly to a process of transforming the prevailing demand and supply conditions.

- b. More orthodox investment criteria, like the rate of return on invested capital, seem more appropriate in the case of Greece. If the existing structure of relative prices does not differ significantly from the structure of "shadow" prices, the private profitability criterion should closely correspond to the social profitability criterion. This, in the long-term, would lead to an efficient distribution of the country's economic resources according to its international comparative advantage. However, even if the above condition was not met, the adoption of the private profitability criterion would lead to a viable, although not optimal, economic structure provided that the expectations of the decision makers concerning the changes in the relative market prices were fulfilled. Another advantage of using the profitability criterion is that it allows for the implementation of the industrial programmes with minimum intervention in the price mechanism.
- c. The profitability criterion, which under certain conditions corresponds to the efficiency criterion cannot be a sufficient criterion in making decisions concerning the allocation of economic resources in a country with a very skewed income distribution and wide regional disparities in per capita income. However, provided that the problems of efficiency, income distribution

and regional development are considered as dynamic and long-term objectives, they are much less competitive than they seem to be at first sight. The existing relative attractiveness of certain regions (Athens) as concentration points of industry is not always due to their comparative locational advantage, but also to an unequal distribution of basic infrastructure which creates external economies. Under such conditions a properly designed regional policy (creation of industrial zones, incentives for decentralisation etc.) may be fully justified even on grounds of efficiency.

- d. Efficiency should also be used as a basic criterion, for the selection of sectors for foreign investment in Greece. Other investment criteria, like the direct contribution of foreign business investment to increasing exports or import substitution, and the existence or not of adequate Greek entrepreneurship may result in discouragement of foreign business investment from some strategic sectors like distribution and banking and their concentration in very few branches of industry. In such a case the effectiveness of foreign business investment in stimulating competition, improving productivity and efficiency standards and increasing the size and diversification of the industrial base of the economy would be very limited.
- e. There is considerable scope for correcting the existing structure of market prices in Greece, through eliminating restrictive practices and unjustified tariff protection, and policies which have serious distortion effects. However, there seems to be very little ground for adopting a complete system of "shadow" pricing in making policy decisions. Some of the prevailing relative market prices (notably high wages relative to the rate of interest), seem to correspond closely to the demand and supply conditions, which are very likely to emerge in the non-distant future. Thus, unless a system of

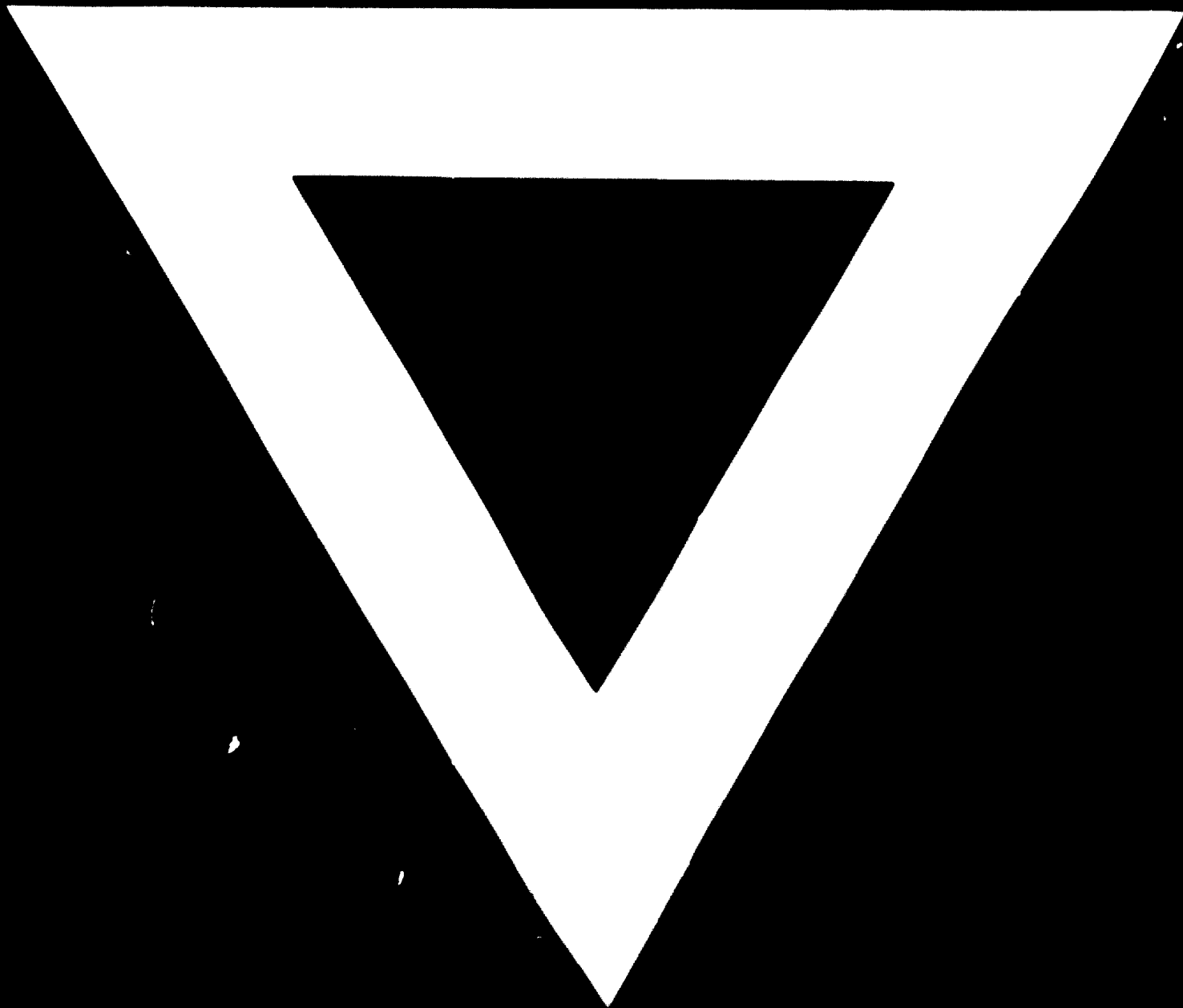
dynamic "shadow" pricing could be derived - which in any case would be very expensive in terms of money and specialized personnel - the use of the existing market price structure corrected on an ad hoc basis (in cases of high taxes or subsidies), seems to be the best alternative.

14. With respect to the use of modern techniques of analysis in the elaboration of industrial programmes the following points are in order: A thorough and detailed macroeconomic elaboration of industrial programmes, including problems of consistency, feasibility and optimality could only be justified if the industrial strategies and policies could be selective. However, if for more general reasons industrial strategies and policies have to be neutral, the macroeconomic elaboration should be limited to the estimates of the likely changes of demand (direct and indirect) for the main industrial products and branches. The problem of feasibility might be more efficiently dealt with in the context of an industrial survey which would also indicate possibilities for exports or import substitution, and the appropriate policy measures. The establishment of detailed production targets is not necessary. However, some hypotheses about changes in production by industrial branch are necessary in order to make proper estimates of capital, total labour, skilled labour and capital import requirements. Unless there is sufficient specialized personnel to conduct the necessary industrial surveys and feasibility studies, we must be very cautious in proceeding to a deeper macroeconomic elaboration of industrial programmes.
15. For a successful industrial survey the close and sincere collaboration of industry and trade unions is of prime importance and should be encouraged by all means. Such collaboration is essential in order to ensure that the results of the survey provide a realistic picture of the potentialities,

weaknesses and problems of the industry. In addition, close cooperation between industry and labour creates a climate of mutual confidence among all interested parties which is of paramount importance for the implementation of the programme. To achieve this end, a careful preparation of such collaboration is required so that the responsible authorities can clarify the points on which the assistance of industry and trade unions is required.

16. If planning is to become fully effective, it should eventually cover technico-economic studies designed to broaden the basis of economically usable natural resources and to improve the human factor. The preparation of such studies may be very important as a means of encouraging business investment and foreign capital inflow. In order to avoid unsound use of scarce human and economic resources the scientific standards of such studies should meet the requirements of international financial organisations.
17. Economic programming and hence industrial programming is ultimately a government and management technique and as such it takes many years to achieve a reasonable degree of efficiency. But just because planning takes such a long time to become efficient, the most important thing is to get it started. Experience shows that there are many cases where the execution of an industrial programme is the most efficient means of identifying and evaluating the weaknesses of the existing political, institutional and administrative set-up, thereby making the task of introducing the required institutional changes easier to accomplish.





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